

PROWAY

SYSTEM HOUSE FOR
PRODUCT SOLUTIONS,
IT PROJECTS AND
CONSULTING

DEVELOPMENT



MADE IN GERMANY



www.proway.de 

ABOUT US



For a safer and better

Future

PROWAY



NATURE &
TECHNOLOGY
FOR A BETTER
tomorrow

Our software products,
inhouse system development
and IT services

DEVELOPMENT



MADE IN GERMANY

for over 25 years



PROWAY

Industry Excerpt	6
About Proway	8
Milestones	10
Milestones	12
Locations, customers and projects	14
Range of services	16
Our product solutions	18
Warehouse Management	20
Proway Business World	22
Modularer Design PBW	24
Proway Factory World	26
Proway Factory World	28
Booster Box	30
Modularer Design PFW	32
Gamma 7	34
Gamma Communication Model	36
Advantages of Gamma 7	38
Gamma for the AI	40
Sensor box	42
Gamma	44
Gamma Test Systems	46
Test System	48
Blockchain	50
Energy Management	52
Central Energy Mangement	54
Energie Costs	56
Gamma Histroy	58
Business Management Software	60
Our IT Projects	62
Service & Support	64
North Atlantic Industries	66
Proway Future Forest	68
Modularer Design PBW & PFW	70
Industries	72
Extract from our Customers	74

PROWAY

PROWAY
BUSINESS WORLD

Gamma

Gamma
ZAUBERWÜRFEL

Gamma
BLITZ

Gamma
ENERGIEMANAGEMENT

PROWAY
FACTORY WORLD

CS6 SUITE
BUSINESS

North Atlantic
Industries

1.

**Consultation
Development**



Applications:

- Consulting & Engineering
- Project management
- Testimonials
- Test
- ...

2.

**Warehouse-
management**



Applications:

- Logistics solution
- Storage
- Conveyor
- Administration
- ...

3.

Middleware



Applications:

- Test Bench
- Plant control
- Management
- Access
- ...

4.

Sensorbox



Applications:

- Smart City
- Smart Factory
- Smart Farming
- Smart Building
- ...

5.

**Protocol &
Data Bridge**



Applications:

- Mechanical engineering
- Manufacturing
- Printing presses
- Conveyors
- ...

6.

**Energy
management**



Applications:

- Energy Overview
- Electr. consumption
- Water
- Heat requirement
- ...

7.

Steelsuite



Applications:

- Band and circular saws
- Welding systems
- Cranes
- Production processes
- ...

8.

**Business-
management**



Applications:

- Controlling
- Project times
- Support
- Vacation / Illness
- ...

9.

Hardware



Applications:

- Measuring instruments
- Simulators
- Measurement
- Multifunction I/O
- ...

Branchenauszug

- RESEARCH & DEVELOPMENT
- TECHNOLOGY
- ENERGYMANAGEMENT
- HEALTH & PHARMACEUTICALS
- INDUSTRY
- MECHANICAL ENGINEERING
- AUTOMOTIVE
- UNIVERSITIES & COLLEGES
- ENERGY, WATER & ENVIRONMENT
- AEROSPACE & DEFENCE
- RAIL TRANSPORT
- AEROSPACE
- BANKING & INSURANCE
- ELECTRICAL INDUSTRY
- LOGISTIC
- FOOD
- PAPER & PRINTING INDUSTRY
- TELECOMMUNICATION
- PUBLIC SECTOR
- AGRICULTURE
- STEELINDUSTRY
- TEXTILE



25 years of success

ABOUT PROWAY

Proway GmbH offers high-quality and technically sophisticated software solutions, software and hardware products and IT projects in all industries. We are your partner when it to optimization and consulting in the field of IT software solutions. We are a fast-growing, internationally active provider of logistics solutions, digitalization, individual software development and IT transformation.

Our employees are spread across the locations:

- Stuttgart
- Munich
- Ulm-Blaustein

As part of our diversification strategy, we have specialized in various sectors:

- Logistics & Industries
- Automotive
- Aerospace & Defense
- Banking & Insurance
- Public Sector

ABOUT US

In addition to traditional IT services, we also offer complete project management and consulting services for the industries mentioned here. Our clients range from medium-sized companies to global players and DAX-listed companies. Companies place high demands on IT systems and software solutions.

Proway is very familiar with the complex system landscapes of large automotive and industrial groups and banks thanks to its many years of experience in implementing projects. Consulting is our top priority, because that's where it all begins. Our employees in the logistics team have 25 years of experience in the logistics sector and have implemented over 110 individual, customer-specific WMS, WCS, MFC, MFR and LMS systems with connections to various ERP systems, automated warehouses, HBWs, tray and shuttle systems. Based on this know-how, our standard warehouse management system PROWAY BUSINESS WORLD has been developed - highly flexible, innovative, modern, future-proof - simply better.



PARTNERS & CERTIFICATIONS

HISTORICAL MILESTONES

Proway GmbH has been offering high-quality, technically sophisticated software solutions, software products, and IT services for over 25 years. At our headquarters in Ulm-Blaustein, in Stuttgart, and in Munich, we are your strong partner, helping you to realize your individual wishes and visions.

2000 **PROWAY**

Foundation of Proway GmbH

In March 2000, Thomas Kammer and a partner founded Proway GmbH. Over the following years, Proway developed into a successful consulting partner for IT services and demanding customer projects. Since its foundation, Proway has been a development partner for renowned German automobile manufacturers, among others. In its 25 years of operation, Proway has gained the trust of other corporations and medium-sized companies in the aerospace, chemical, industrial, mechanical engineering, telecommunications, public sector, and logistics industries. Business relationships that have existed since the company was founded have been further expanded, strengthening the trust between partners.

2002

Software-based damage documentation

Development of modern software specifically designed for the efficient and comprehensive documentation of accidents and damage incidents. With our solution, you can quickly and accurately record all relevant information—from road closures and road damage to cleanup and recovery work.

2004

Construction site and traffic information system

Proway uses data location technology to provide a construction site and traffic information system for the state of Hessen and geographical mass data for the German Armed Forces.



2006 **CS6 SUITE BUSINESS**

Product development of the Business Suite CS/6

Development of Business Suite CS/6 as a project, ticket, and time tracking system, which has been continuously refined for our customers since 2003. The sophisticated controlling and management system provides a clear overview of projects at all times.

2009 **AIRCERT**

EN 9100:2009 certification

Specialized certifications within the quality management system that are specifically tailored to organizations in the aerospace and defense industries. Our certifications ensure that your company meets the highest standards in quality, safety, and reliability.



DEVELOPMENT

MADE IN GERMANY

2011

Expansion of the financial services sector

The banking world is in flux and constantly facing new challenges. Proway provided support in setting up the financial services division of a major German bank.



2013

New development of an innovative warehouse management system: Proway Business World (PBW)

The new PBW warehouse management system, with its unique range of functions, was developed based on over a hundred customer-specific WMS, LVS, and MFR custom developments, as well as our employees' many years of experience in the field of logistics. At the heart of every logistics facility is the software that ensures that all areas, transports, and processes mesh smoothly. Proway Business World (PBW) is an advanced WMS with a unique range of functions.



2016

Validation Proway Business World

Our WMS was successfully validated for the first time by Fraunhofer IML (Institute for Material Flow and Logistics) and has received the validation seal. The validation process covers the areas of functions and processes, practicality, and technology.



2018

Division of Proway GmbH

Due to the rapid growth of the IT services business and product business, the shareholders have strategically repositioned themselves. The IT services and product solutions divisions were spun off under the leadership of shareholder and managing director Thomas Kammer with the new entry of Proway GmbH in the commercial register. Proway is thus consistently pursuing a two-pillar strategy consisting of IT services and innovative software products.

2019

TISAX® certification

The successful completion of TISAX® certification in 2019 underscores Proway GmbH's commitment to ensuring the highest level of security in the communication and processing of information, especially with customers.



2019

North Atlantic Industries

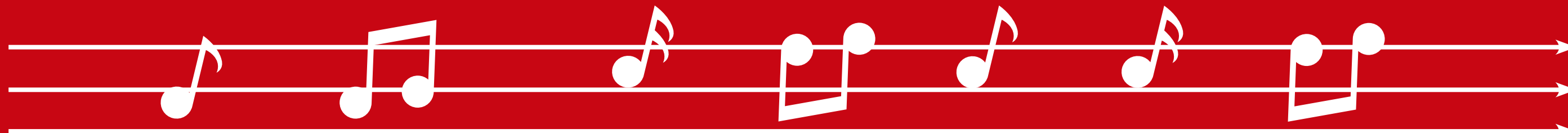
We are the distributor for North Atlantic Industries in Germany, Austria, and Switzerland. We are happy to advise you and are available to answer your questions at any time.



2020

20 Years Proway

Proway is celebrating its 20th anniversary and looks back with pride on its success story. Since our founding on March 1, 2000, IT services and product solutions have been our passion.



HISTORICAL MILESTONES

2020  **Gamma 6**

Our proven Gamma 6 middleware solutions offer companies a comprehensive platform for the automation of standard processes and the smooth integration of complex data structures. The Gamma series middleware is designed to manage systems efficiently, automate processes and ensure seamless communication between different components and locations 3 ideal for modern companies that need future-oriented, scalable solutions.

2021

Proway Future Forest

Proway stands for nature & technology for our future. We love our forest and our nature. We take responsibility for this as a sustainable and future-oriented company. Using the slogan "For a safer and better tomorrow", we thought about how we could unite nature and technology. The first step was our "rethinking": How do we manage to help our nature with our technology. The result was that we need to give back a piece of what we have already taken from nature.



2022  **TISAX® certification**

TISAX certification takes place every 3 years to ensure the highest level of security in the communication of customer information and data. This gives our customers and partners the assurance that they are on a trustworthy and future-oriented service provider.

2022

Validation Proway Business World

Our WMS was once again successfully validated by the Fraunhofer IML and continues to bear the official validation signet 3-independent proof of performance in the areas of functions, processes, practicality and technology.



2022

Energy saving

Achieve at least 30% savings in energy costs for cities, municipalities and industrial companies. Our technology makes it possible to determine energy consumption such as water, electricity and heat in real time.



2022  **Gamma Flash**

The Gamma Flash is a protocol & data bridge, also known as a hardware data mediator, protocol converter, protocol converter, data bridge, middleware or data adapter. In modern production plants, machines generate a large amount of data through sensors and actuators.

2023

23 years Proway

After 23 years, we have reached another successful year in our company's history. As part of our company anniversary, we will be planting another park tree in our Proway Future Forest.

23
JAHRE

2023

Autonomous driving

We support autonomous driving with a standardized database and perfect timing in real time. Our GAMMA Free Drive middleware is the key: it seamlessly connects systems, synchronizes data streams and creates the basis for safe, reliable next-generation driving-functions.



2023  **Energy management visibly simple**

Energy management is the systematic planning, monitoring and improvement of measures to increase energy efficiency and reduce energy costs in municipalities, energy suppliers, municipal utilities, industrial companies, businesses or various organizations.

2023

Validation Proway Business World

We successfully completed our WMS validation again this year. Our warehouse management software continues to meet all relevant requirements in terms of efficiency and quality. This ensures that our logistics software remains reliable, transparent and powerful. A clear sign of continuous further development and process security.



2024

24 years Proway

A new park tree in our Proway Future Forest stands for 24 years of company history and for another year of success in what we do.

2024

For a better future

We are constantly thinking about how we can use our know-how and our decades of development to improve other products for the future of our customers.



2024

Growth at the Proway Group

The Kaltenbach.Solutions GmbH from Freiburg (Germany) becomes part of the Proway Group. This expands both our product portfolio with IoT-based solutions for digital performance management and our industry focus.



2025  **TISAX® certification**

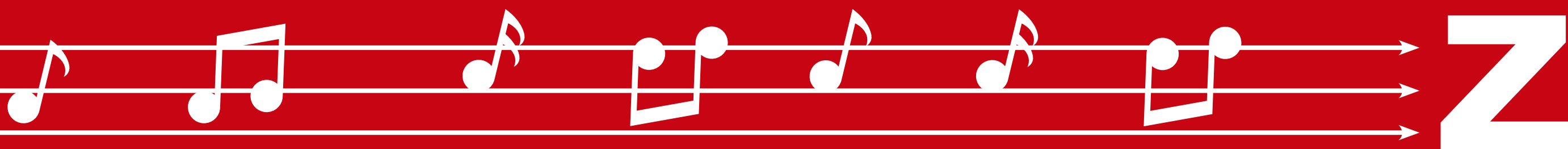
We have successfully passed the TISAX® certification and thus meet the strict requirements for information security in the automotive industry. Our processes have been audited in accordance with the VDA ISA standard and meet the highest security and data protection requirements. This gives our customers and partners the assurance that they are on a trustworthy and future-oriented service provider. Another milestone for our quality promise.

2025 *Always Proway*
25 Jahre Jubiläum

25 years Proway

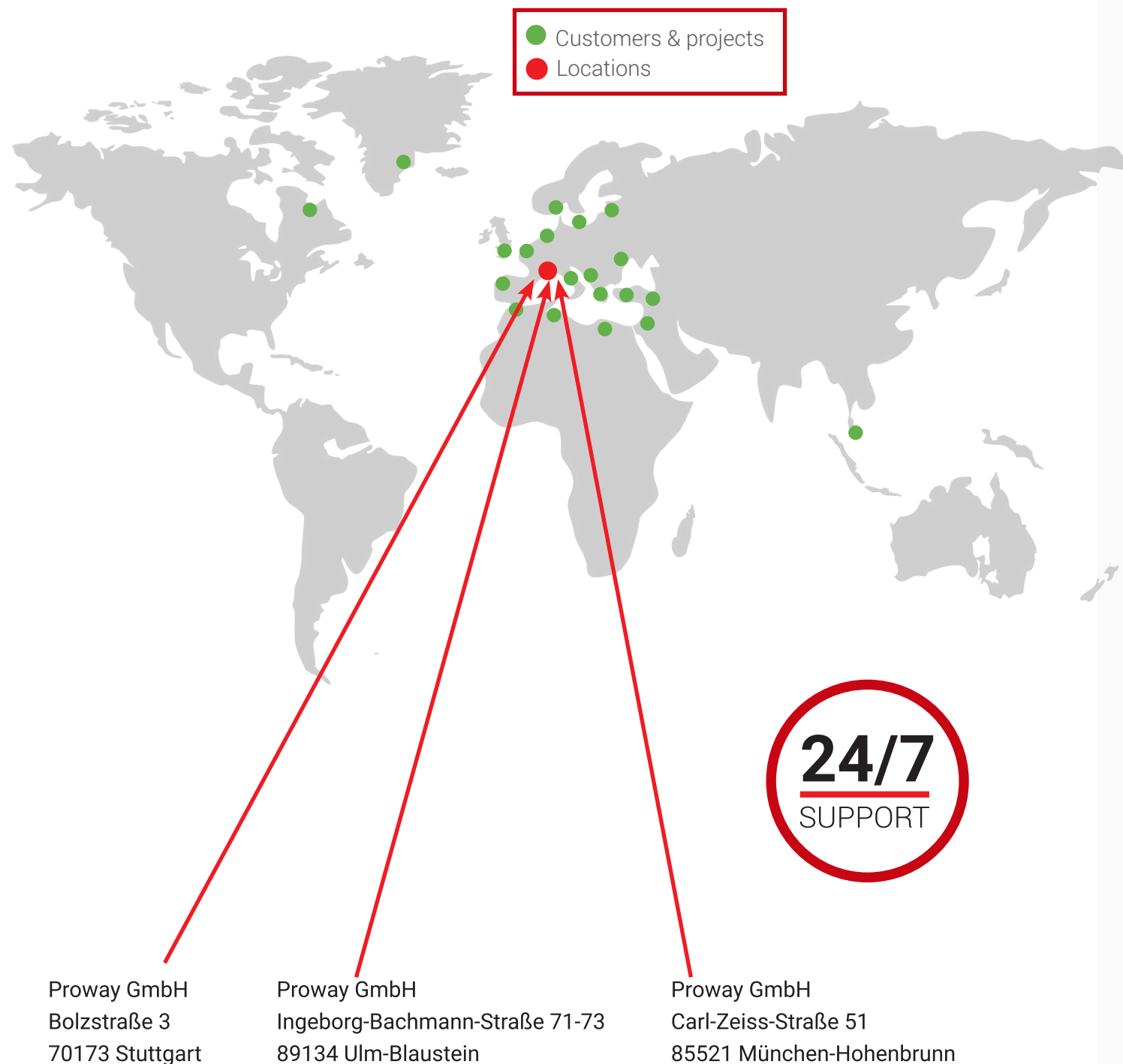
This year we are celebrating our 25th company anniversary. A special historical milestone that not have been possible without our loyal customers, committed employees and longstanding partners. For a quarter of a century, we have stood for quality and innovation.

25 years of success



GLOBAL CUSTOMERS AND LOCATIONS

Proway stands for high development quality, which is why we develop software exclusively in Germany at our locations in Stuttgart, Munich, and Ulm. We offer 24/7 support to our license customers.



OUR PHILOSOPHY

We have been active in consulting for over 25 years and extensively with software. As a system house, we follow the maxim: We advise and realize your projects.

In order to implement successful projects for our customers, we have invested in and developed our product solutions over a long period of time to be able to offer our customers unique software solutions: Our warehouse management system Proway Business World, our middleware platform Gamma, our organization and time recording system CS/6 and our sensor box Gamma magic cube. In addition to our own product solutions, we offer high-quality hardware products as a distributor of the manufacturer North Atlantic Industries.

We are now all aware that companies working with standard solutions can only compete in the global price war for services and products. At Proway, our goal in consulting and software development is to enable our customers to operate better and more successfully on the market. In this way, we maintain our long-term customer relationships, with which we can offer our customers real added value for the digital future.

Proway itself a good example: we not only use our product solutions in customer projects, but also in our own company. With our customer projects and our many years of experience with our own products, we create innovations through which we maintain successful customer relationships in international markets. In addition, our know-how from our research projects with the Fraunhofer Institute is constantly incorporated into our development and our projects.

In order to offer our customers and employees a safer and better future, we combine nature and technology. With our Proway forest, we are setting an example for the future. For example, we have planted different types of trees in our Proway Future Forest counteract climate change. In the near future, this will develop into a park that will make Proway's forward-looking thinking and sustainability in nature and technology recognizable there too.

***For a safer and better future.
Let's continue to on this together!***

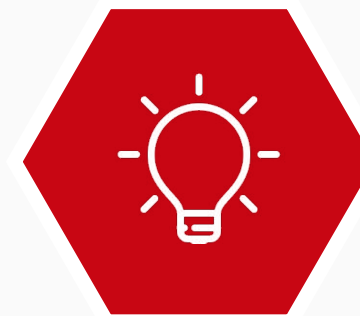
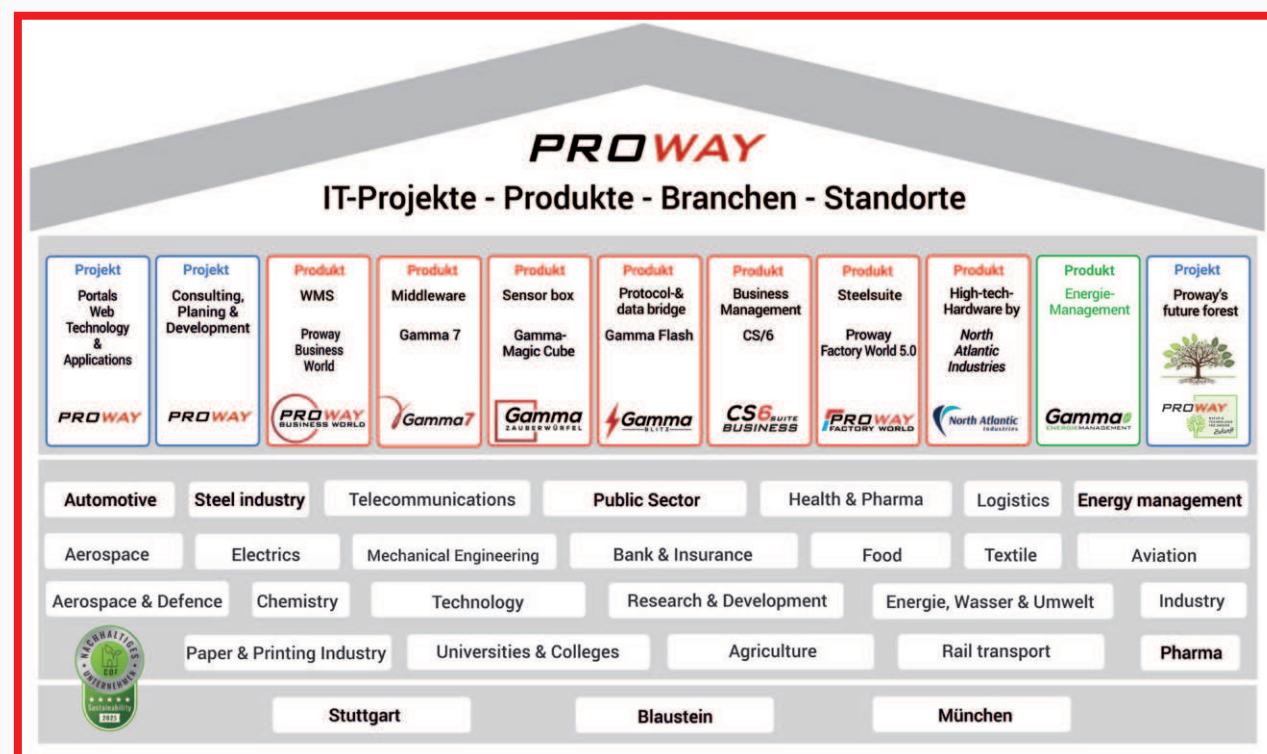
RANGE OF SERVICES

The hardware and software industry undergoing huge changes. In order to pace with this rapidly changing market, Proway pursues a two-way strategy. This means that Proway offers its customers consulting and development expertise as well as comprehensive product solutions.

On this basis, Proway has built up its expertise and know-how in the specialist and IT areas over many years it not only reinforced by successful certifications, but also confirmed by the annual Fraunhofer product validation. The framework for this is provided by the current level 3 TISAX security protection, which Proway can offer its customers in terms of security.

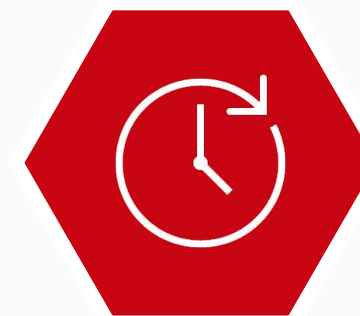
Only on the basis of products can companies build up their specialist and technical expertise and consolidate it over the years into an important foundation. Good product solutions have a generic structure. The focus is on the individual needs of the customer. The software must to the customer, not the customer to the software. Proway can usually cover 70 to 80 % of requirements with its product solutions and guarantees its customers secure project success right from the start. Projects are no longer a danger, but a guaranteed success.

Proway's customers value the many years of experience of its consultants and software developers in complex, often international projects. Proway also offers software development projects in larger dimensions at a fixed price, giving the customer financial security.



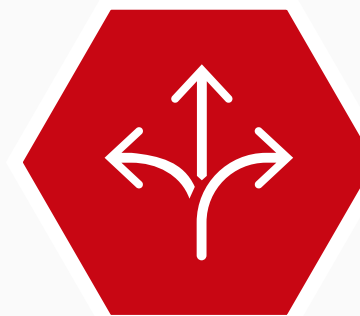
INNOVATIVE

In addition to our product and hardware solutions, our range of services is innovative and wide-ranging: it extends from development in a research network to digital transformation, the digital twin and artificial intelligence. We strive for constant change and progress.



FUTURE-PROOF

We are a future-oriented company with a structured approach, high quality standards through in-house development with the goal of successful projects in mind. Proway stands for nature & technology and takes responsibility as a future-oriented and sustainable company with its own Proway Future Forest.



FLEXIBLE

Through intensive and close contact with our customers, we offer short response times and implement customized solutions quickly, efficiently and flexibly, while always keeping a close eye on changes in the market. Our aim is to combine technologies in order to create added value for our customers.



RELIABLE

We are characterized high customer satisfaction, cross-industry expertise, transparency and openness. Our customers benefit from the expertise of our teams and our consistent networking with customers and partners in all sectors.

OUR PRODUCT SOLUTIONS

In addition to our consulting and development services, Proway also sees itself as a software system house with its own specially developed product solutions. Proway pursues a two-pillar strategy consisting of services and software products.

In order to build up long-term know-how and strategies in the software sector, it is necessary to continuously bundle the knowledge gained. Despite the enormous technological progress in software development, development needs time to be implemented in productive or active operation - and time is money.

We have continuously built up and consolidated this knowledge over decades in our four products. As a system house, we offer our customers sophisticated product solutions that have been used by our customers for many years and are constantly being developed further. Our product solutions have a long history with a high degree of stability and security. We rely on state-of-the-art technologies so that you are always one step ahead of your competitors.

In addition to our own product solutions, as a distributor of the manufacturer North Atlantic Industries, we offer high-quality hardware products from the areas of single-board computers, multifunction I/O boards, rugged power supplies and synchro/resolver simulators, among others.

100.000
SENSOREN
PROWAY PERFORMANCE

DEVELOPMENT
MADE IN GERMANY



Warehouse-Management-System

Proway Business World

Logistics solution
Mapping of the entire goods and information chain



Gamma 7 Middleware Communication Platform

Gamma

Middleware
Connection of sensors, fieldbuses and systems with different tools



Gamma Magic Cube

Sensorbox
Connecting technology and machines



Gamma FREE Drive

Autonomous driving



Gamma Energy management

Energy portal for consumption measurement, data transfer and monitoring



Proway Factory World

Machinery-independent technology for production and the steel trade



Business Management Software

CS/6

Project, ticket and time recording system



North Atlantic Industries

Customized solutions for data acquisition



Proway Future Forest

For a safer and better future

WAREHOUSE MANAGEMENT

***Organization, control, analysis and optimization of goods flow and logistics 3 worldwide.
Can be used for any warehouse in any branch.***

The heart of every logistics system is the software that ensures that all areas, transports and processes interact with one another. With PROWAY BUSINESS WORLD (PBW), all flows of goods and information along the logistics chain can be organised, controlled, mapped and analysed in real time - even across different logistics sites.

The flexible and strictly modular PBW is suitable for all manual, semi-automatic or fully automatic logistics systems through to complex high-performance logistics systems. PBW can be adapted to new requirements or expanded with new functions at any time in order to keep pace with the further development of your company or your procedures and processes.

A major feature that sets PBW apart is the high level of configurability and the associated adaptability. If your processes and warehouses change, these changes/innovations can be implemented directly into the system without any trouble or major effort. PBW works with key values which can be changed by the user.

This allows the user to customise the system to the needs of the company. During the development of PBW, great care was taken to ensure a high level of configurability, enabling the creation of a powerful tool - a standard product that can be almost completely customised.

MORE THAN JUST SIMPLE WMS

WAREHOUSE MANAGEMENT SYSTEM PROWAY BUSINESS WORLD

Proway Business World enables you to design your value chain efficiently, precisely and quickly. This ensures continuous improvement in quality, customer satisfaction and sales. Thanks to its modular and integrative structure, PBW can be used in projects according to specific requirements and allows for efficient distribution of functions, which brings with it excellent testing options and transparent documentation. The modular separation enables parallel processing of tasks without mutual dependencies and ensures high performance. The system allows warehouse management and material flow computers for various automation units and hardware providers to be run within a common database, thus saving costs for servers and licenses.

VALIDATION

Our WMS has once again been successfully validated by Fraunhofer IML (Institute for Material Flow and Logistics) and has received the validation seal. The validation process covers the areas of functions and processes, practicality, and technology.

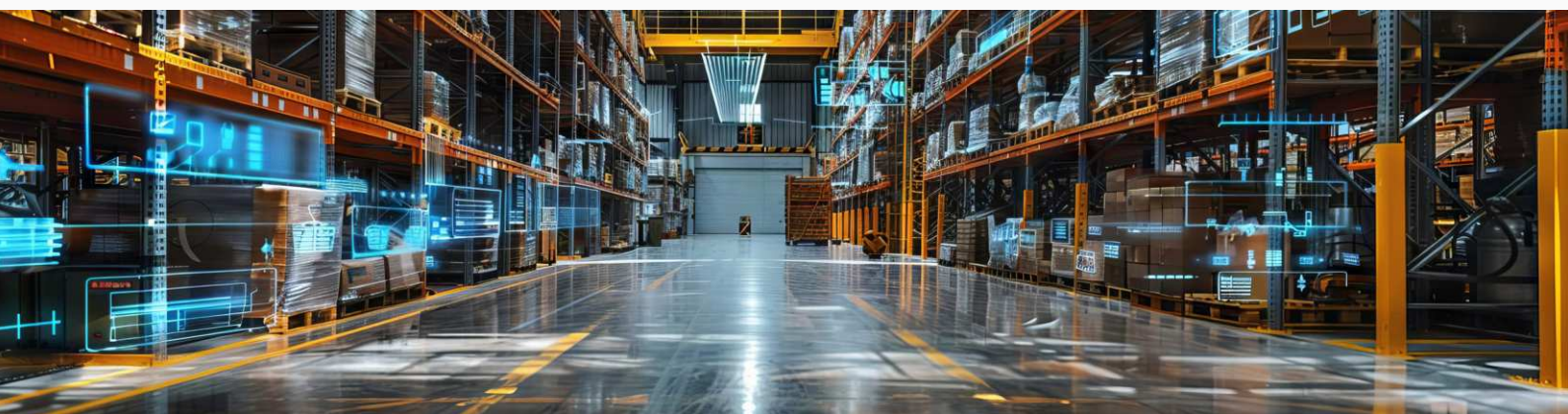


PROWAY BUSINESS WORLD

Due to the integration of our warehouse management and material flow computer within PBW, no separate interface is required between the warehouse management system and the material flow control. The dialogues of the various modules for warehouse management and transport control are integrated for the user in a single application. Interfaces to external systems such as SAP, scales, automated warehouses or dispatch service providers are already available as standard or can be implemented projectspecifically in a way that existing

systems and architectures do not have to be adapted. PBW is preferred available within the MS SQL Server landscape. The preferred operating system is Microsoft Windows Server. The application is based on a native Microsoft Windows client and is also available as a web application for various browsers. Centralized management allows software updates to be imported without major administrative costs. A comprehensive online user manual, which can be down loaded directly from the application rounds off the user concept and offers the operator the best possible support.

State-of-the-art technology and the highest demands on our own work guarantee our customers - from small businesses to globally positioned medium-sized companies to globally operating corporations - a constant increase in their competitiveness. Benefit from the advantages of PBW's professional logistics software and stay ahead of the competition!



DECISIVE ADVANTAGES

- + Higher performance**
No waiting and no delays. PBW works in real time
- + Cost reduction**
through optimized transport routes with as few transport steps as possible
- + Simple and error-free operation**
through intuitive user interface and contextual input
- + Continuous improvement**
quality, customer satisfaction and sales through efficient and precise
Designing your value chain
- + Time saving**
through digitalisation and automation of your logistics processes with Proway Business World
- + Individual use**
through role- and user-defined permissions, as well as in different languages.
Flexible customisable text modules
- + More flexible storage and better warehouse overview**
through dynamic storage location management with occupancy variants and graphic display of the warehouses, production and shipping
- + Optimization of process costs**
with activity based costing in Proway Business World with further calculation
- + Intuitive production control**
optimum production planning with just a few mouse clicks in PBW

MODULAR STRUCTURE

PBW has a modular structure. Your system receives all modules that are relevant to your warehouse. If your business changes, additional modules can be flexibly added to your PBW.





Machinery-independent
technology for production
and the steel trade

- Modular and scalable

The modular and scalable digital solution for your production

PROWAY FACTORY WORLD is the browser-based digital industry solution for the manufacturing industry and the stockholding steel trade. It combines state-of-the-art technologies from the fields of IoT and data analytics into an integrated solution. This enables you to achieve unique results for a sustainable increase in efficiency in the use of human, machine and energy resources.

- ▶ **Efficient work and communication processes**
support the employees. Several machines can be monitored simultaneously and all information on the processes can be accessed.
- ▶ **Simple implementation**
without additional work for your IT department.
- ▶ **Increased customer satisfaction**
in terms of order planning and adherence to deadlines.
- ▶ **Efficient digital processes**
with regard to the connection of machines and systems in order to optimize the order to track the development of the business.
- ▶ **Higher machine availability**
through graphical representation in the dashboards. The utilization of the machines can be evaluated and mapped.
- ▶ **Anticipating maintenance appointments**
reduces the downtime of machines and systems. This means that machines are efficiently utilized.
- ▶ **Pragmatic implementation**
via the Proway Factory World Portal for quick installation. The digital Nothing stands in the way of transformation on the store floor.



PROWAY FACTORY WORLD

Plug & Play solution,
without additional project costs

- ▶ Implement digital transformation in the shopfloor easily, quickly and without high costs.
- ▶ A solution for the digitalization of machine interfaces.
- ▶ Recording of order, operating, machine and energy data in the shopfloor.
- ▶ Data-based key figures as a decision-making basis for strategic planning and control of production.
- ▶ Graphics and key figures for optimizing strategies.
- ▶ Evaluation of key machine figures to increase the availability of the load. Maintenance costs can be sustainably reduced.
- ▶ Energy consumption is measured for transparent presentation and optimization.
- ▶ Summary of all operating costs on the basis of consumption figures.

**PLUG
PLAY**&



IOT-HARDWARE

Precisely measure the productivity of machines and systems

The BoosterBOX is used when machines do not have their own data interfaces or when it is uneconomical to implement it. In these cases, our BoosterBOX is installed directly in the control cabinet of a machine as a plug & play device. It then records all relevant performance data during operation and transfers it to Proway Factory World.

Data is transferred from the BoosterBOX to Proway Factory World using an LTE, WLAN or LAN connection. This guarantees a stable and secure data flow.



The advantages of the BoosterBOX

- ▶ Suitable for all machines and systems of any age, regardless of manufacturer and technology.
- ▶ Compact design, fits into almost any switch cabinet.
- ▶ Sturdy aluminum housing in IP 65 design for use outside the control cabinet.
- ▶ Quick installation thanks to integrated magnetic feet on the back of the housing.
- ▶ Plug & Play: All connections are made with plug connectors.
- ▶ Own power supply with integrated UPS for stable and gapless recording of performance data.
- ▶ Data transmission between BoosterBox and server optionally via LTE, WLAN or LAN connections.

**PLUG
& PLAY**

**ONE
ALL4**



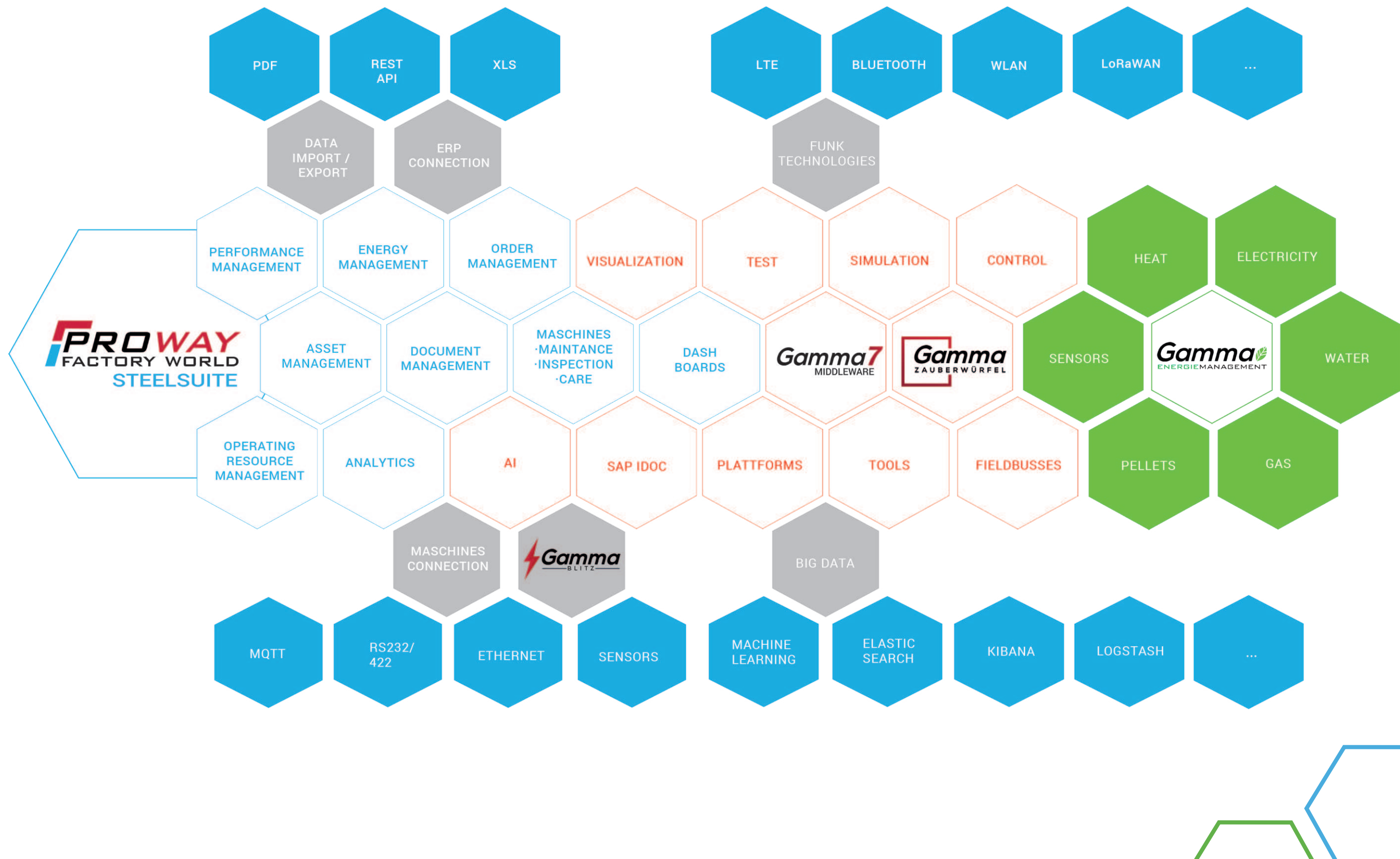
MODULAR STRUCTURE OF THE PROWAY FACTORY WORLD

Proway Factory World has a modular structure. This means it can be easily adapted to changing conditions at any time.

Proway Factory World can be integrated at any time, regardless of manufacturer, technology, or age.

DEVELOPMENT

MADE IN GERMANY



GAMMA 7

Gamma 7 is a middleware that combines sensors, fieldbuses and systems with various development tools in a unique way. With numerous interfaces and tools from different manufacturers, machine controls or powerful test and simulation systems can be set up. Entire production systems (shop floor) can be abstracted.

Imagine a platform that relieves your developers of the repetitive standard tasks so that you can focus fully on your specific application. A platform that independently controls and manages processes and data within your systems, that supports you during development and remains open to new standards so that it simplifies maintenance and upgrades for your customers. A standardised platform for service-oriented test systems, end-to-end machine control systems or for production in line with Industry 4.0 requirements. Modular, expandable as required and independent of existing hardware. This platform is called Gamma 7.

The middleware provides the 'universal connector' between different layers. Whether robots, sensors, PLCs, machines or tools - Gamma 7 always connects all sectors in the optimum form of communication. The open system architecture combines different hardware and operating systems, networks, fieldbuses, sensors and actuators with a variety of tools and programming languages.

With the middleware platform Gamma 7, machines and systems are reorganised with each other and connected to different systems. Older control computers can also be networked and integrated into machine parks. The complete production data is then available for evaluation and further processing on various IT systems.

Gamma 7 is already being implemented successfully in the modernisation and planning of industrial and production facilities, in test systems and for aerospace, automotive, mechanical engineering and medical technology applications.

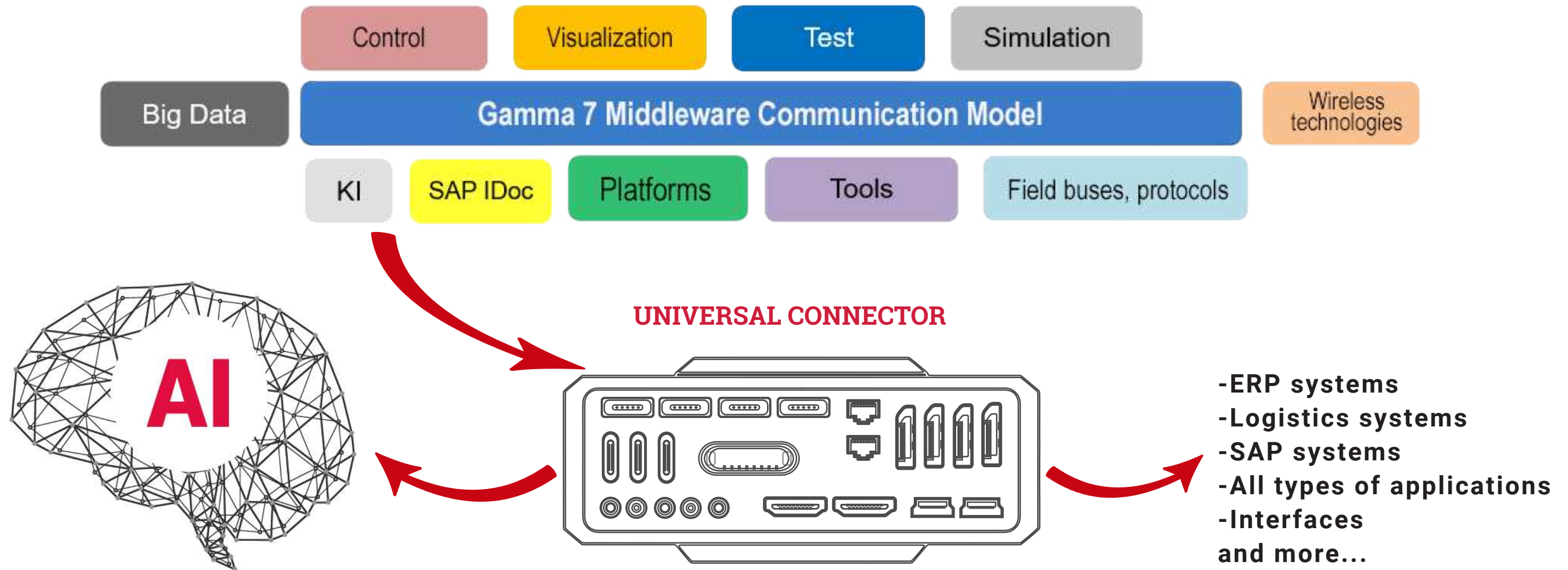
COMMUNICATION AND INTEGRATION PLATFORM

The most important step in the development of modern applications is the control and handling of communication processes. Processes must exchange data and coordinate with each other, sensors supply data and actuators must be controlled. The Gamma 7 platform supports all important forms of data communication. These work across all systems and can be combined with each other as required, making them ideal for any application. Unlike most other technologies, Gamma 7 supports both basic forms of communication:

- Discrete-time cyclic data communication via shared memory
- Message-based communication via multibroker



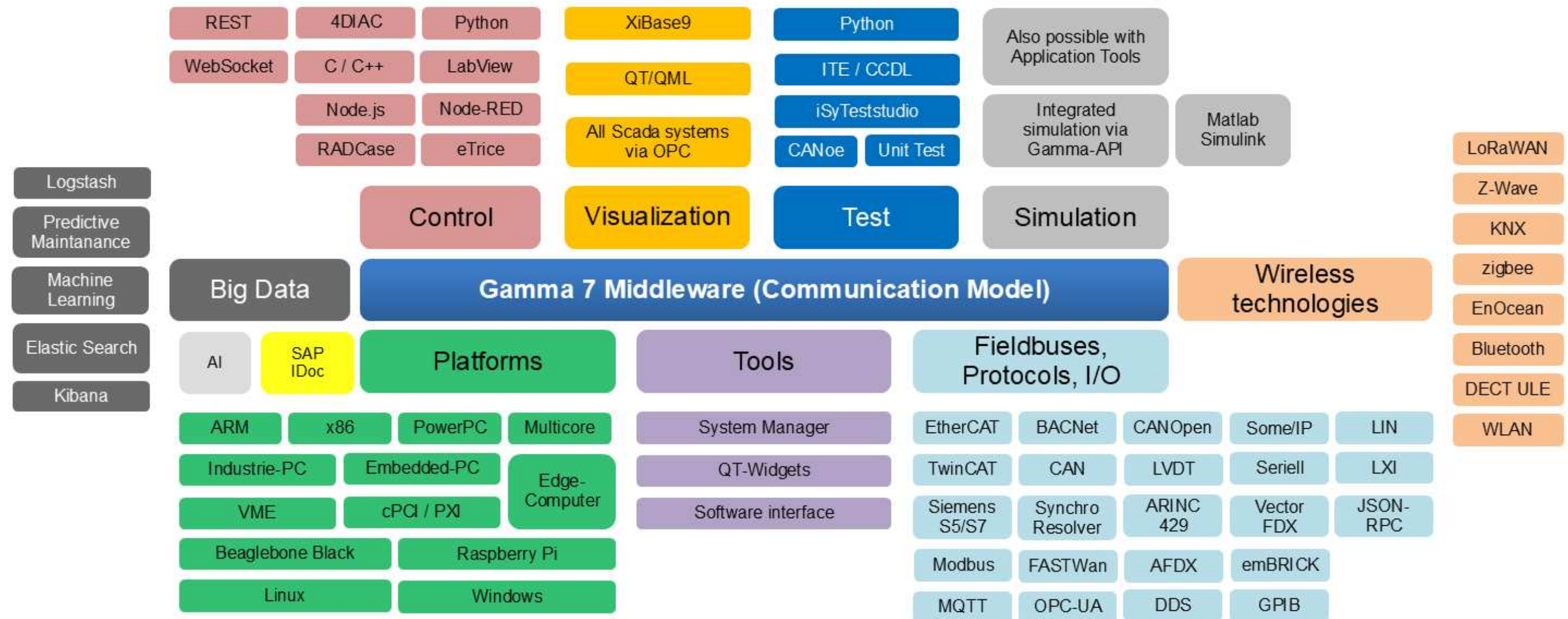
UNIVERSAL CONNECTOR



Thanks to the open interfaces, our Gamma middleware platform is extremely flexible and is therefore ideal for updating the control and operation of existing systems, as the software can be integrated directly into the existing system. Conversely, the modernization of systems operated with Gamma is also very simple, as new sensors, actuators and other hardware can be easily integrated into the control software via plugins. As far as possible, the new (embedded) systems have the same external interfaces.

As we work with simulation models of the hardware to be controlled for application development, it is not necessary - in contrast to the conventional approach - to shut down systems in operation for development work. Depending on the scope of the changes, only the software or the control computer is replaced or the cabling prepared in advance is reconnected. This minimizes downtimes and commissioning times and thus saves money.

THE GAMMA ECOSYSTEM

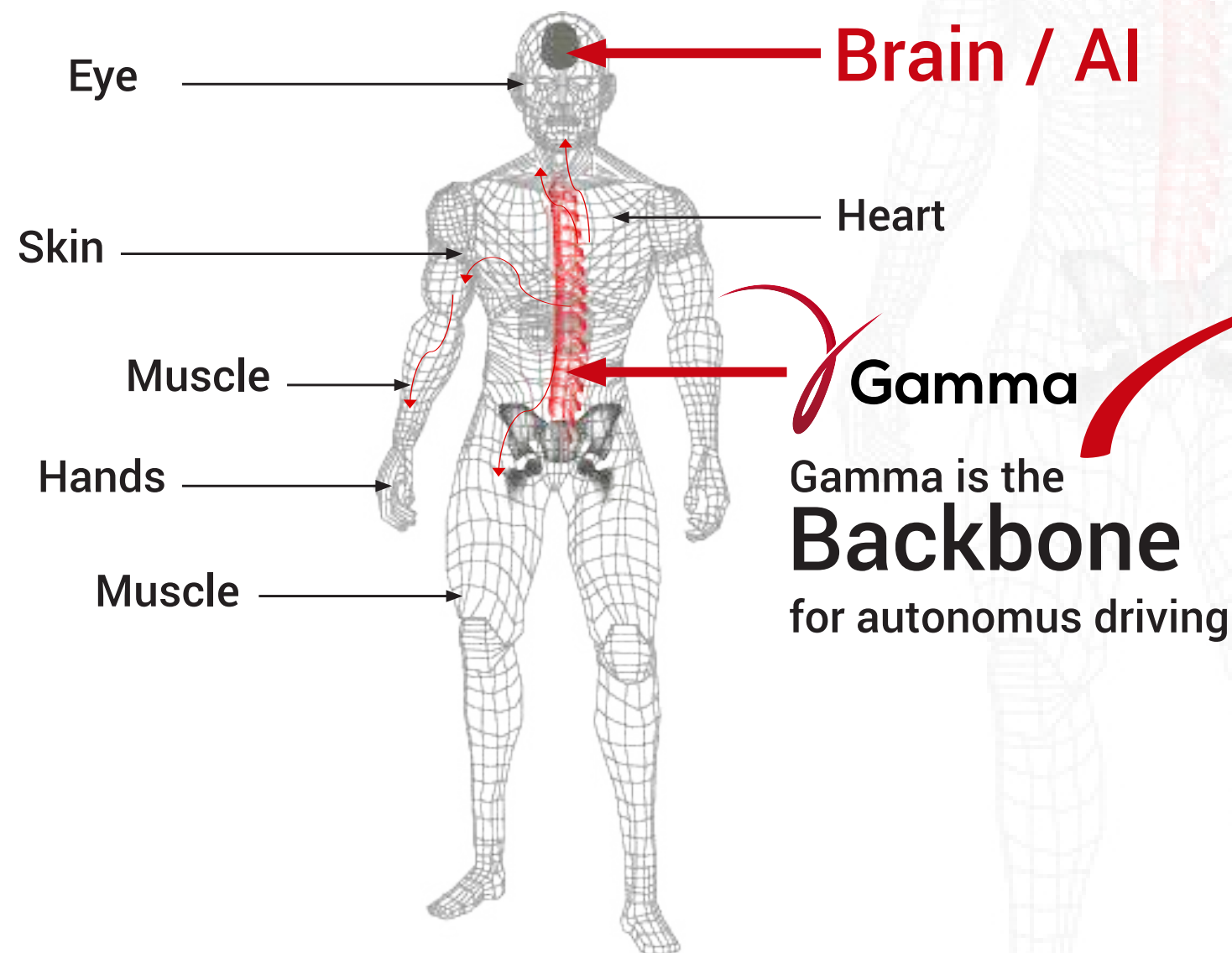


GAMMA FOR THE AI

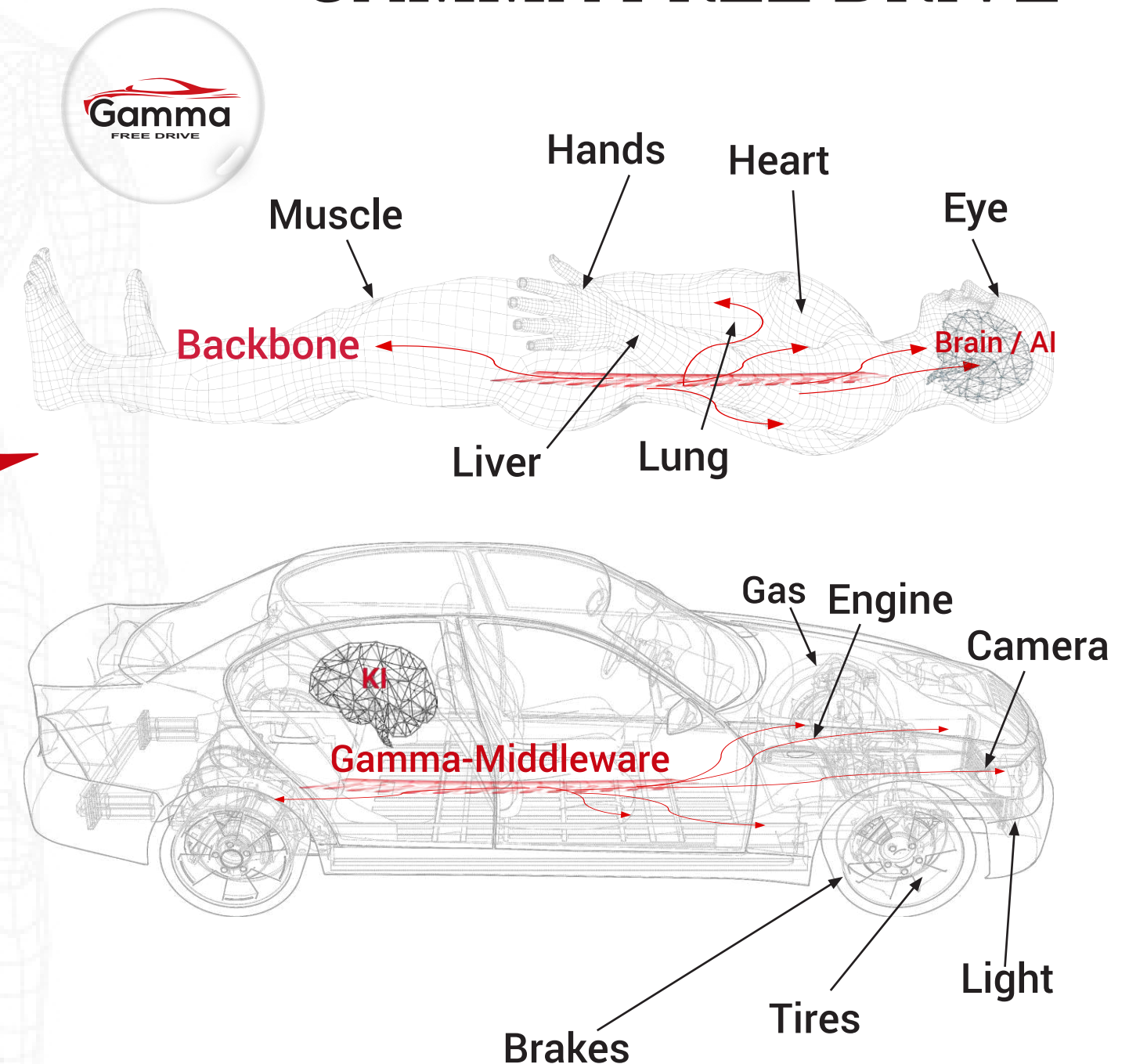
Together with our partners, we can offer numerous other solutions for the Gamma platform. These include vector-based visualization solutions, soft PLC solutions (IEC61131 and IEC61499), textual and graphical, partly model-based, programming methods that are based directly on the data model, as well as development environments with a connection to the Gamma API. Special tools are also provided for testing, e.g. for model-based tests for HIL, MIL and SIL applications. This creates an extensive ecosystem from which customer-specific solutions can be precisely compiled.

- Customers benefit from systems that are optimally tailored to their needs and into which their own core competencies can be easily integrated.
- System partners have access to an easily adaptable system platform that enables them to market their own products as well.

GAMMA FOR THE AI



GAMMA FREE DRIVE



Autonomous driving requires various types of driver assistance systems that interact in the higher levels of the overall system. Examples include brake, traffic jam, lane departure, turning, and parking assistants, as well as adaptive cruise control. In addition, there are various sensor systems. Autonomous vehicles must be equipped with systems for environment detection. In addition to cameras, these passive systems also include laser, ultrasonic, radar, and/or lidar sensors for distance measurement and for processing further information from the vehicle's surrounding.



SENSORBOX

In the aerospace industry since 1986



MY DATA

The owner of the data is the client. Neither the city nor an industrial company can view your data without it being passed on personally.

INDEPENDENT OF LOCATION

Overview of all data as well as control and monitoring of work processes on mobile devices (smartphone) possible from anywhere.

SAFETY

Keep an overview, but in your own network..

NO CLOUD SOLUTION

No cloud solution, only if desired. Access via your own network.

ENCRYPTED WIRELESS CONNECTION

Secure connection via Bluetooth, WLAN, LAN, D-networks and LoRaWAN

With the Gamma Magic Cube, you work in your own network with your own structure. Your data remains your personal data. That's why our solution is also called the Gamma Magic Cube, because our cube gives you the security of knowing that your data is protected from misuse.

SENSORBOX GAMMA MAGIC CUBE





ADVANTAGES

- Independence of location
- Increased flexibility
- Time saving
- Sustainability and environmentally friendly business practices
- More efficiency
- Optimization of your own operations
- Compatibility with numerous sensors from different manufacturers
- Longevity of the sensors
- Low energy consumption of the sensors
- Data security, no loss of data sovereignty

WEB-BASED. **WORLDWIDE.** AT ANY TIME

GAMMA

SMART FACTORY

In the age of digitalization, machines, products, people and systems need to be connected and networked in order to Industry 4.0 standards and enable largely automated processes. Using our Gamma Magic Cube, entire machine parks can be organized and controlled in real time. Products communicate with machines and initiate their next production step themselves, machines issue maintenance messages, e.g.B. at a critical level of the filling level.

SMART CITY

To make life in cities more efficient and safer, safety sensors can be used to monitor cities in real time, for example. From traffic monitoring to air pollution and access control. The range of use cases extends from intelligent lighting and irrigation to air monitoring and security.

SMART FARMING

Self-driving tractors, drones that spray pesticides and high-tech milking robots are already in today. But even without robots and high-tech equipment, your yield can be increased. This is possible by connecting sensors to our Gamma Magic Cube. For example, sensors can be used to optimally coordinate the fertilization time of your field. The health status of animals can also be monitored, e.g. by determining the vital signs of sick or pregnant animals.

SMART HOME

Protect your own home with sensors against burglary or natural hazards, and even monitor rooms when you are away. Sensors can also be used to determine the air quality at any time in order to create an optimum indoor climate.

GAMMA TEST SYSTEMS

MIDDLEWARE PLATFORMS ARE IDEAL FOR DEVELOPING AND BUILDING TEST SYSTEMS.

Thanks to their modularity and abstraction capabilities, they offer maximum flexibility when integrating both standardized and highly specific I/O hardware. Our standard middleware Gamma 7 goes even further: Integrated functions such as simulation (and failure injection), automatic logging, and time models for coordinating all real-time processes support and facilitate test programming and execution. Gamma is open to all relevant test languages and procedures – from simple scripting via Python or JavaScript to test generation and execution in ROOM, CCDL, Matlab Simulink, etc. The customer decides for themselves:

- The customer can purchase the Gamma 7 communication platform with all its tools, including consulting and support
- The customer commissions Proway to carry out the complete creation of the test system with application

Proway develops the test systems with application together with the customer



STRESS TESTS UNDER REAL-TIME CONDITIONS IN THE AUTOMOTIVE INDUSTRY

Gamma is used not only in aerospace testing, but also in other industries, such as automotive, mainly in "hardware-in-the-loop test systems." In most cases, the goal is to subject embedded systems to special stress tests under real-time conditions. Gamma takes over every single control with simulation and generates the desired states for the test objects with logging of the system response. This allows the corresponding systems to be tested in terms of their functionality and integration. Scripts (preferably Python) and customized drivers can be used not only to automate specific test tasks, but also to generate interface simulations or targeted error injections. The Gamma-based HIL systems can be easily expanded with additional third-party components. Control units and real-time units are often separate. If the test horizon is to be expanded, Gamma generates the necessary abstraction across systems, i.e., it communicates with or controls both other (real-time) Gamma instances and other middleware systems from existing third-party providers. QT or proprietary tools can be used to visualize test sequences and states.

There is also the option of a cloud connection via the messaging service of the Gamma 7 middleware. This allows different cloud providers and BigData tools to be used across multiple clients.



APPLICATION: GAMMA 7 AS THE BASIS FOR MODERN TEST SYSTEMS

Gamma 7 offers a standardised runtime platform for test applications, enabling the integration of any embedded hardware and I/O functions. With numerous plug-ins available for various I/O boards, fieldbuses and network protocols, suitable test platforms can be configured quickly and easily depending on requirements.

We also offer suitable tools from partners that are very easy to adapt to these platforms. Gamma 7 also simplifies the porting of existing test tools with the corresponding test scripts.

Gamma 7 offers numerous functions that are already integrated into the platform, which are essential for modern test systems and can be easily integrated into your own application as required. The use of these ready-made modules reduces the development effort.

The available function modules include:

- Process data model for cyclic and time-synchronous test scripts
- Multibroker system with send/receive and publish/subscribe functions
- Simulation interface for failure injection
- Time model for synchronisation of the test scripts in a multicore environment
- Data logging for storing process data
- Structure of distributed services for cloud-based testing

High-level languages such as C/C++, Python, Node.js or Javascript as well as integrated development tools such as MatlabSimulink, LabView, iTestStudio or ITE with test languages such as CCDL can be used for programming and test generation.

The scalability of the platform enables the use of individual measuring devices, mini testers and networked control cabinets. Even multi-site testing is no longer a problem. The trend towards service-orientated testing, where more and more tasks such as control, error management or coordination are being outsourced to external systems, is met by the platform with its message-based communication architecture.

Gamma 7-based test systems can be used as an environment simulation for unit tests in both development and production. Due to the standardised structures up to production level, a product can be monitored right through to series production and end-to-end quality assurance can be provided. Gamma 7 is currently being used successfully by numerous test customers and service providers in the avionics, automotive and automation sectors.

TEST SYSTEMS

TEST SYSTEMS ARE INDISPENSABLE IN MANY INDUSTRIES

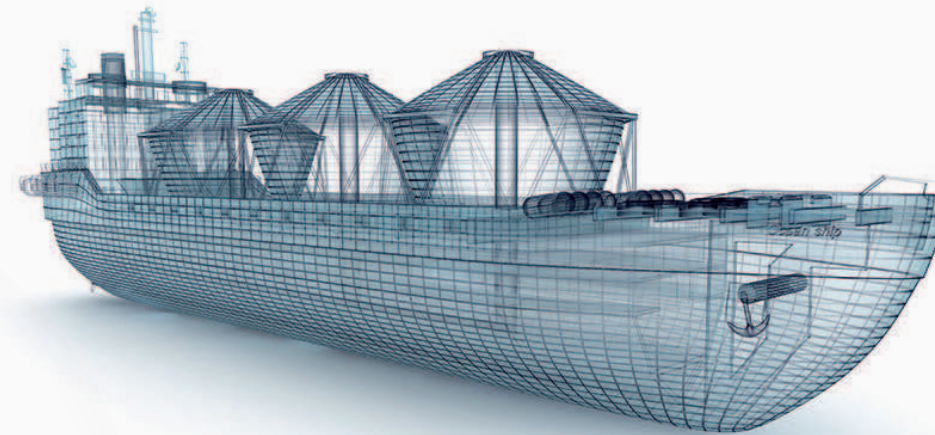
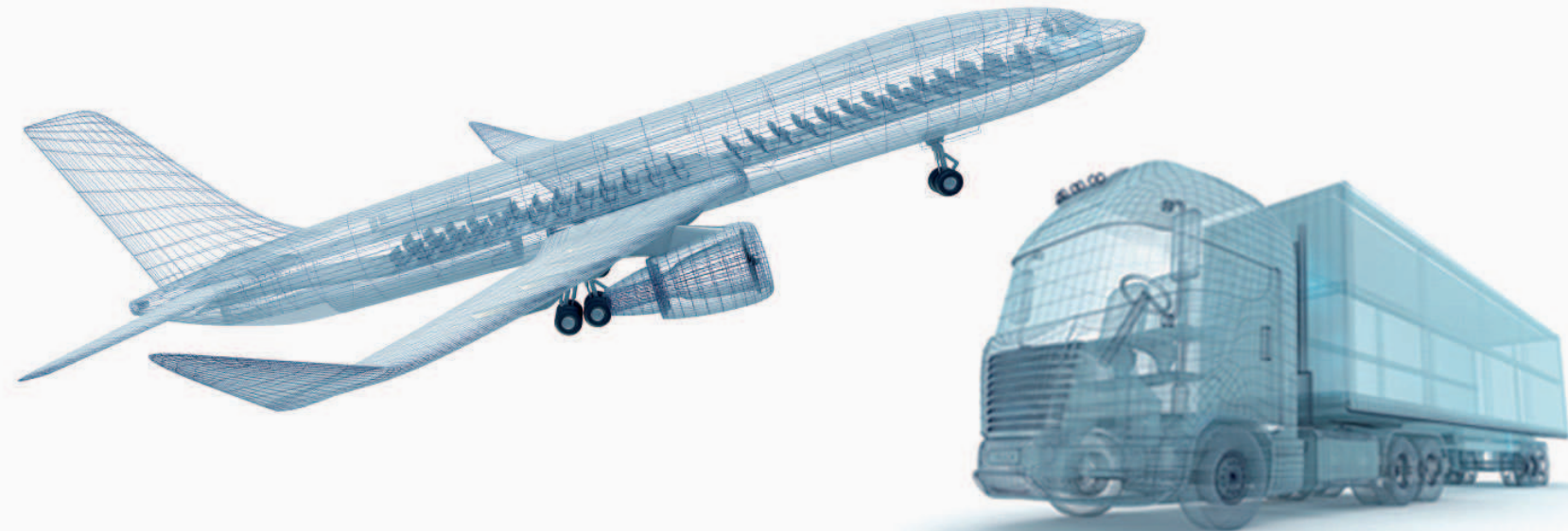
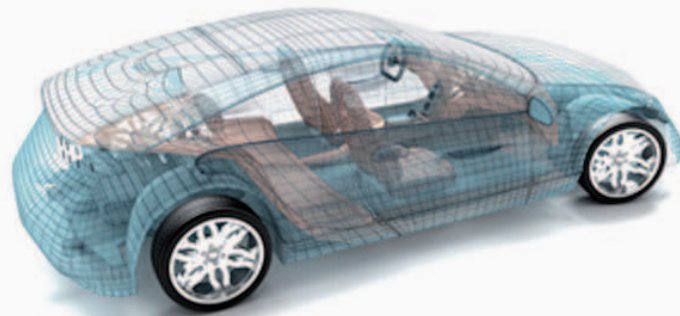
The testing industry is undergoing radical change. Whereas test systems were previously only for final inspection and quality assurance in production, today product design increasingly begins in the computer, where state-of-the-art simulations are based on classic methods from the testing industry. This means that long before a prototype is placed in a test bed as hardware-in-the-loop (HIL), it is already possible to work virtually with model and software-in-the-loop (MIL /SIL). This change makes continuous testing a constant companion in product development.

PRODUCT SOLUTIONS

- Proway Business World I Warehouse Management System
- Gamma I Middleware platform in real time
- Gamma dice I Smart Solutions / Sensorbox
- CS/6 / Business Management Software

IT PROJECTS

- Project and interim management
- Test management
- Consulting & Engineering
- Portals and applications



SECURE AND FUTURE-ORIENTED
SOFTWARE TECHNOLOGY

DEVELOPMENT

MADE IN GERMANY



PROWAY
GOES PERFORMANCE



BLOCKCHAIN TECHNOLOGY



The use of blockchain technologies has increased strongly in the last few years, particularly in the field of digitalising business processes. One of the applications of blockchain technologies is the protection of critical processes in automated production and logistics.

The blockchain developed by Proway will be integrated into the next generation of our Gamma 7 product solution. Blockchain-based data storage will be implemented as a component of our established Gamma middleware and expanded to include crypto/blockchain technologies.

The focus is on tamper-proof and decentralised management of:

- log files and bookings (past operations)
- commands and rights (current operations)
- programs and schedules (future operations)

Gamma blockchain technology is located at the source of critical data and provides a secure, decentralised, tamper-proof and transparent solution for the exchange between nodes in the network.

MAIN ADVANTAGES

- No centralized data storage
- Securing the authorship of data
- Stabilisation of collaboration along the entire supply chain

USE CASE 1: ACTIVITY-BASED COSTING AND RESOURCE MONITORING

In multi-step product manufacturing, each step in the process can require complex cost accounting, from raw materials and labor costs to customization and shipping costs. All of this can be difficult to track, especially when third-party companies are involved. In addition, chemical products typically need to be stored in sensitive storage environments where humidity, temperature and containment can be monitored.

We implement a solution that provides a clear, permanent record of cost-intensive processes and/or transactions by database changes in a private blockchain. This provides company executives with a clear, unambiguous data history at a forensic level. In cases where materials are lost, damaged or improperly stored, as well as in accounting applications such as expense tracking, this is extremely useful.

USE CASE 2: AEROSPACE TESTING

Proway has a proven track record of supporting aerospace testing using the Gamma middleware. We can extend this process to the Gamma 7 concept and offer blockchain-based data storage.

USE CASE 3: SECURITY SYSTEMS

We can also implement the Gamma 7 concept with a complex security system and transmit access logs, sensor logs and more to a private blockchain. The recording of activities is very helpful as evidence in legal matters.



ENERGY MANAGEMENT


Energy management is the systematic planning, implementation, monitoring and improvement of measures to increase energy efficiency and reduce energy costs in municipalities, energy suppliers, municipal utilities, industrial companies, businesses or various organizations.

The basic prerequisite for successful energy management is the precise recording of consumption data and its progression over time for different energy sources. In practice, many approaches fail due to a lack of transparency. The Proway Dashboard and its tried and tested tools such as Gamma Flash and Gamma Magic Cube offer you a robust solution for effective energy management.

FUNCTIONAL MODE

With our technology, the energy consumption of electricity, water, heat, oil and gas is determined in real time on an hourly, daily, weekly, monthly and annual basis. In addition to the absolute consumption values, the customer also gains valuable insights into seasonal consumption patterns or daily peak consumption times, for example, and can detect implausibly high consumption values, such as burst water pipes, at an early stage before major damage occurs. In addition, it is possible to compare similar consumer units with the aim of optimizing demand (benchmarking or best practice solutions).

These visible figures and consumption values can be used to analyze the actual costs operating an IT system or how high the electricity consumption of the purchased air heat pump actually is. The energy costs for electricity, water, heat, heating oil, pellets or gas can clearly illustrated and determined using the dashboard and the graphical display. In , the values determined from the energy portal can used to plan and implement far-reaching energy-saving measures.



SAVE ENERGY VISIBLY AND EASILY

CENTRAL ENERGY MANAGEMENT

DASHBOARD

Gamma
ENERGIEMANAGEMENT

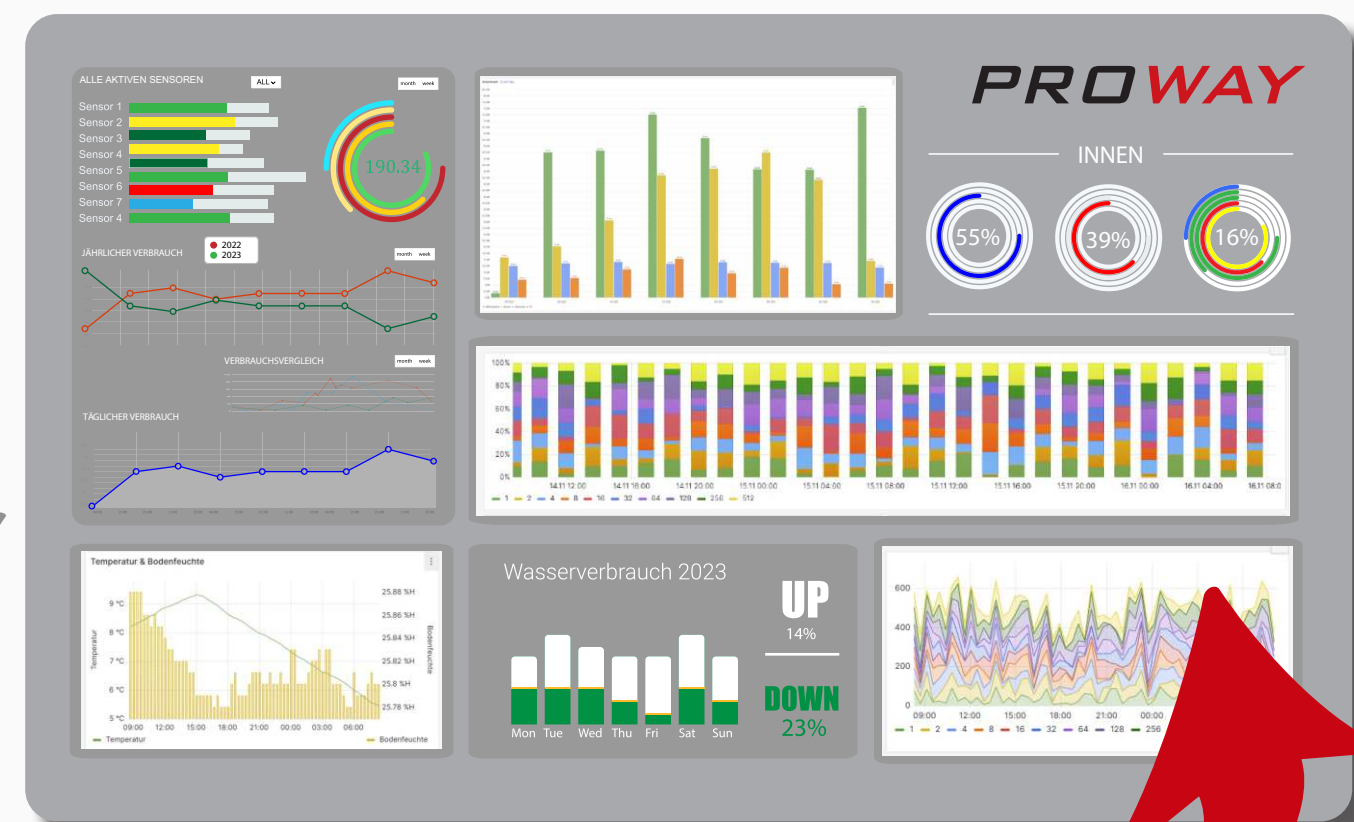
CUSTOMER
IDENTIFICATION

YOUR ENERGY PORTAL

DATA TRANSPORT

MEASURE CONSUMPTION VALUES

WE OFFER YOU
CONCEPT SOLUTIONS



Gamma
ZAUBERWÜRFEL

+

Gamma
BLITZ

The energy management portal serves both as a monitoring and control portal, but above all as a separate energy account. Thanks to the hourly, daily, weekly or annual consumption values that can be called up, a complete overview with cost control is guaranteed. This makes it possible to find more effective ways to save energy and plan expenditure. The definition of predictable expenditure for heating oil, pellets or electricity creates the conditions for better budgeting.

ENERGY COSTS

 FOR MUNICIPALITIES, ENERGY SUPPLIERS & INDUSTRIAL COMPANIES AND OTHERS

 MANAGEABLE EFFORT FOR THE INSTALLATIONS

 FAR-REACHING SCALABILITY UP TO 100,000 PAYERS & SENSORS



TECHNICAL REQUIREMENTS:

- Mains availability for connecting Gamma Blitz and Gamma Magic Cube to the power grid
-> No further cabling required

SERVER OPERATION AT PROWAY:

- is also secured for large volumes of data via Proway
Encryption of data

OPERATION DASHBOARD:

- Online access to a PC, laptop, I-Pad or cell phone

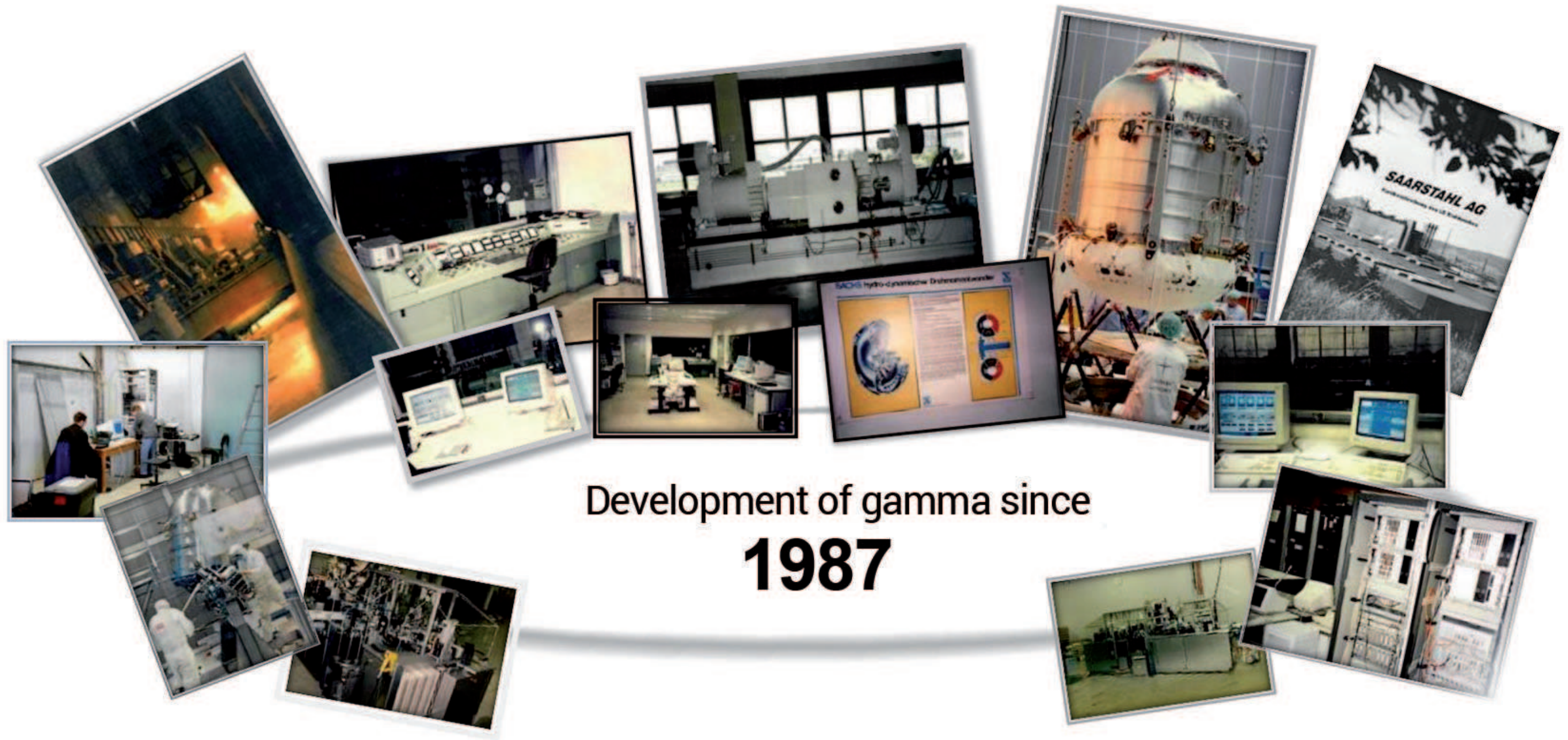
Gamma 
ENERGIE MANAGEMENT



SAVE ENERGY COSTS

Immediately visible, easily save energy costs and always have an overview of your consumption values in real time - with our technology Gamma Magic Cube, Gamma Blitz and our energy management dashboard you can keep an eye on your energy costs at.

THE SUCCESSFUL GAMMA STORY



The Gamma communication and integration platform has been in continuous development since 1987. Although the foundation of Proway was still a long way off at that time, the foundations were in the 1980s.

These developments and the growing requirements of our customers laid the foundation for the future establishment of Proway in 2000.

In March 2000, Thomas Kammer and a partner founded Proway GmbH. In the years that followed, Proway developed into a successful consulting partner for IT services and demanding customer projects.



ADVANTAGES FOR PERFORMANCE-ORIENTED PROJECTS

- Clear & transparent cost structure of the service catalog
- Processes and tasks more transparent & comparable
- Project and team members controllable
- Measure & improve services
- Tasks & processes can be clearly broken down and assigned
- Project and ticket organization CS/6 transferable and adaptable
- Better planning of projects and tasks
- Performance is verifiable
- Projects are more calculable
- Faster & more structured project management

BUSINESS MANAGEMENT SOFTWARE

Our CS/6 product is a cloud-based software solution. Employees are managed via a very comprehensive and sophisticated role and rights management system. Not only individual employees can be coordinated, but also entire teams and even large organizations. The product solution has been developed since 2003 so that important project data such as project times, support, vacation, illness, controlling, etc. can be managed very easily without losing the overview.

The core functions of the CS/6 include:

- Organization
- Personnel
- Technology
- Project management
- Time recording
- Controlling
- Ticket & Support
- Inventory management

Thanks to their modular structure, the core functions can be selected variably and adapted to individual requirements. The focus is on the services provided by employees, which can be mapped in an organizational and customer-oriented manner.

CS6 SUITE
BUSINESS

BUSINESS MANAGEMENT
SOFTWARE CS/6

OUR IT PROJECTS

Proway offers expertise in business consulting, project management, quality management, IT architectures, software development using the latest methods, commissioning, roll-out, maintenance and further development. Proway is already very familiar with the complex system landscapes of large automotive and industrial groups as well as banks and logistics service providers thanks to its many years of experience in the implementation of projects.

Our range of services extends from project management, planning, design and development to testing and integration. We put a diverse team of experienced project managers, consultants and developers for each project. We offer you high quality standards through in-house development.

PROJECT AND INTERIM MANAGEMENT:

Project Management | Task
Force Management |
System and software project
Management | Methods

CONNECTED SYSTEMS

System and software
architecture | System and
software integration | Software
testing | Technology expertise
System testing

PORTALS AND APPLICATIONS

Portals | Web application server Finance |
Automotive industry | Integration

CONSULTING & ENGINEERING

IT software | system architecture
Business process and system
optimization | Engineering
services

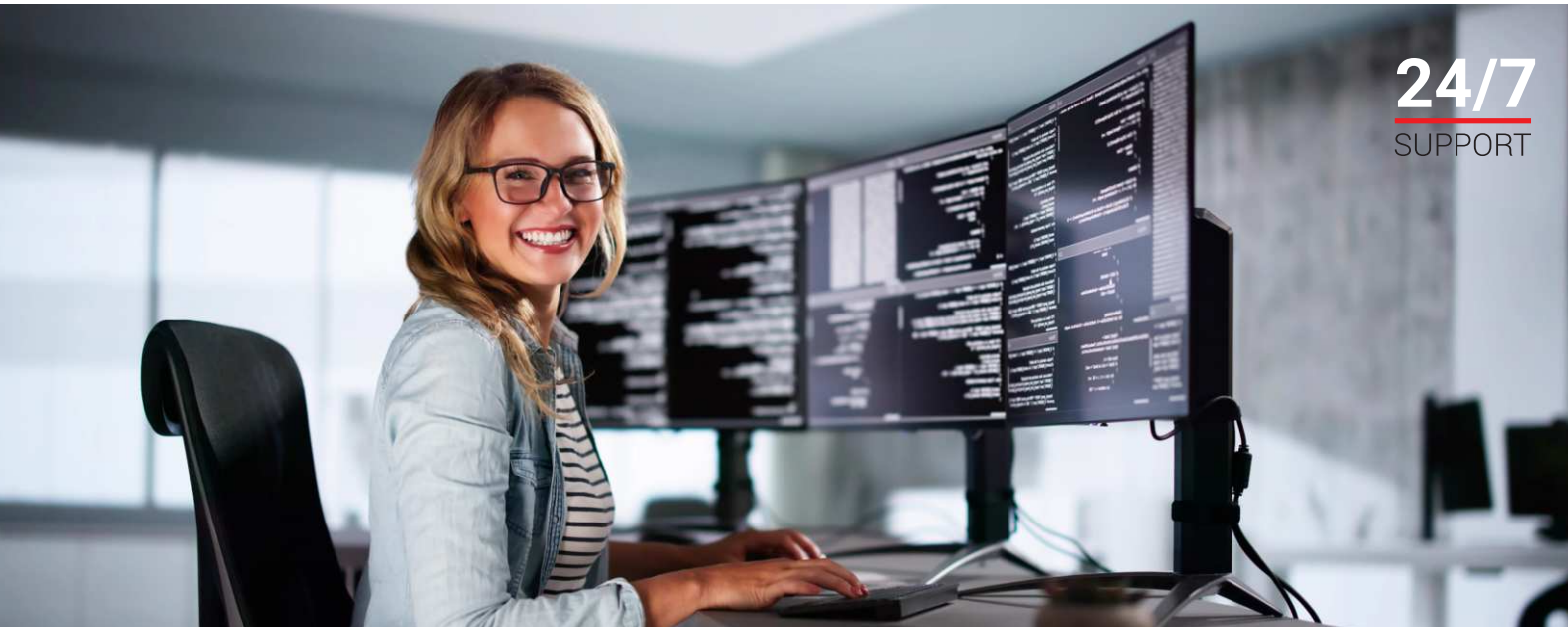


OUR IT SOLUTIONS AT A GLANCE:

- Process modeling, UML, functional and technical conception
- Project management, design, development, testing and integration
- Business process analysis and optimization (UML, Aris)
- Internet-based application with web browser front end
- Connection of backend systems / hosts via middleware
- Analysis, design and implementation of applications
- Enterprise Application Integration (EAI)
- Business Process Management (BPM)
- Infrastructure solutions
- Rollout, support and helpdesk

IT SERVICES TAILORED TO
YOUR INDIVIDUAL
REQUIREMENTS

COORDINATED
PROJECT PROCESSING
FROM A SINGLE SOURCE



CONNECTED SYSTEMS

Today's systems in our daily environment and in the manufacturing industry consist of software, sensors, actuators and hardware and, together with high-performance data transmission, form widely networked systems. Intelligence and knowledge are distributed and used by many. These systems are characterized by a large number of individual components and their suppliers worldwide. Wireless, wired or directly in the same software process space, the components are integrated with each other and offered to users as a tangible function. Industry boundaries are disappearing in face of strong and diverse networking. Automotive, logistics, household appliances, smart homes, industry and mobile devices all have the same requirements for connected systems, despite different quantities. We take care of bringing them together as part of a managed integration.

CONSULTING AND ENGINEERING SERVICES

You have special requirements that cannot be met by standard software. You want to be faster than your competitors with customized software solutions. No matter how sophisticated you it to be, our consultants will work with you to realize your wishes. Our range of services extends from project management, planning, design and development to testing and integration.

Proway offers qualified support with short response times on request. Qualified support means that our support staff have in-depth knowledge of the respective customer installation and are able to act immediately if necessary.

SERVICE & SUPPORT

PROJECT AND INTERIM MANAGEMENT

Project management is the basis for corporate success in a complex environment. Systems consist of many components that have to interact and work together. Internal and external suppliers are involved in the projects to very different extents. Project management also means achieving goals in these circumstances. Our project managers and project moderators are engineers with development and product experience who accompany projects in all project phases together with their interdisciplinary teams. We ensure international standards by certifying our employees in accordance with PMI.

PORTALS AND APPLICATIONS

Use Proway's portal and application solutions as your data hub. Existing data and documents are integrated and linked with any other applications. All as usual in the browser and completely secure. Our portals and applications are based on platforms as diverse as Windows®, SUN Solaris® or Linux, which work together perfectly. This ensures that our solutions remain available even if an operating system is changed or a system environment is expanded. At the same time, our system architectures are designed in such a way that they can be expanded at any time and are suitable for both large corporations and medium-sized.

24/7
SUPPORT

To cover customer-specific support requirements, the customer can select different support models and response times, which we define in a separate support or maintenance contract. Of course, the customer can choose their desired support times, up to 24/7.



HIGHTECH HARDWARE NORTH ATLANTIC INDUSTRIES

We are a distributor of the manufacturer North Atlantic Industries for Germany, Austria and Switzerland. We are happy to advise you and are always available answer your questions about measuring devices, simulators and multifunction I/O cards.

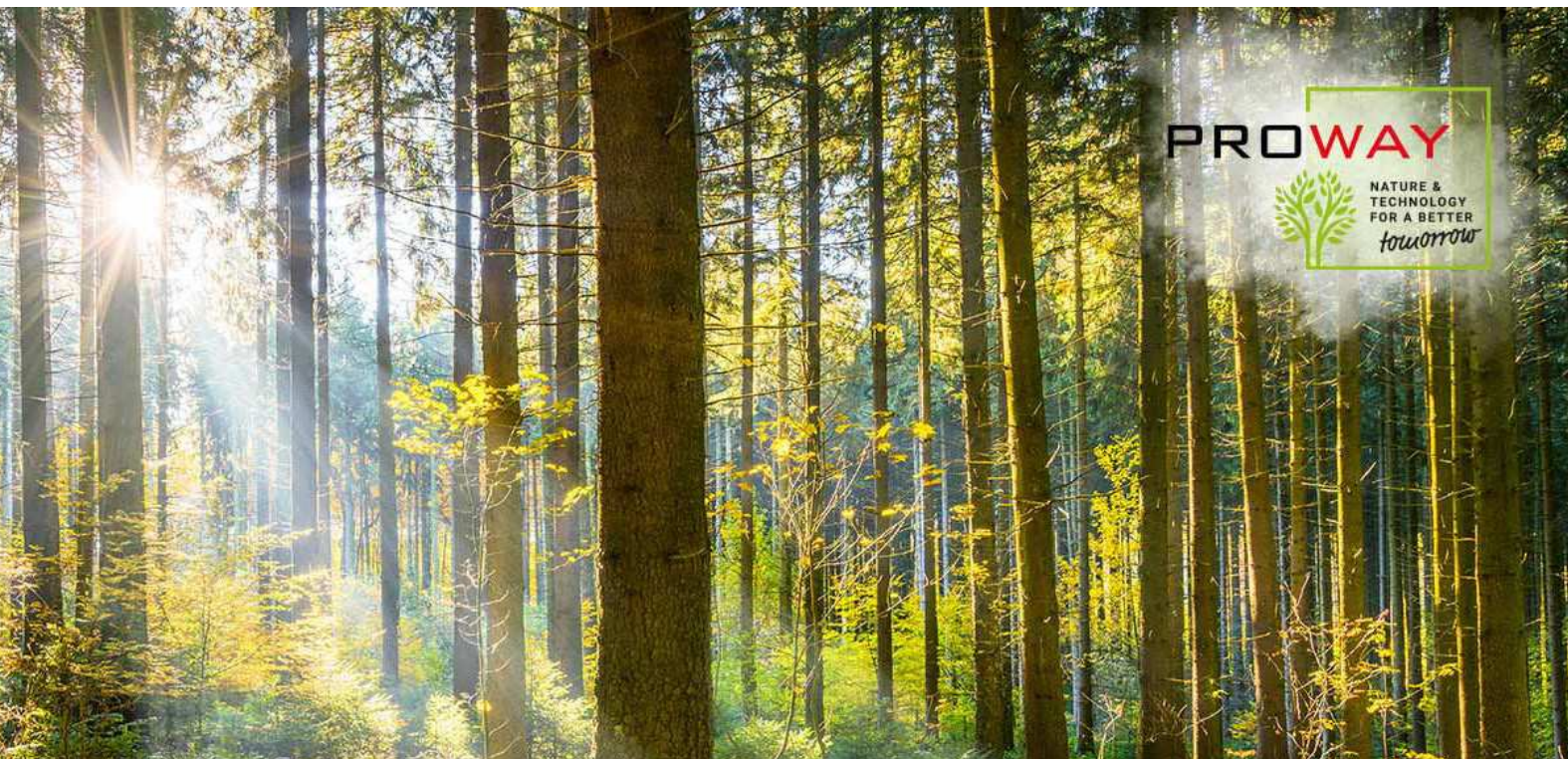
The high-tech hardware manufacturer North Atlantic Industries builds customized data collection solutions you. For you, this means that the hardware is available more quickly and cost-effectively. These advantages are achieved by equipping standardized carrier boards with specific function modules according to your desired configuration. By combining different processors with fast FPGAs, compact solutions are created that are ideal for time-critical applications and high-precision sensor technology. The modular systems offer all the advantages of standard COTS products, but also greater functionality and flexibility - at a lower cost.

EXCERPT FROM HARDWARE PRODUCTS

- Multifunktions-I/O-Boards
- Single-Board-Computer
- Rugged COTS Systems
- Rugged-Power-Supplies
- Industrial and measurement technology



HIGH-TECH HARDWARE FROM NORTH ATLANTIC INDUSTRIES



Sustainability usually means saving resources. Be it in the consumption of energy, protecting nature and the environment or treating each other with care.

For us at Proway, sustainability also stands for the future and we have already this a great deal of thought. To be able to juggle with the future, ideas are essential. But to be able to take the next step, you have to know the goal. Experience, ideas and time are necessary for success. The software sector is comparable to a good whisky. It needs time to mature and investment is also necessary in order to achieve commercial success later on. We at Proway have been following this path with our product solutions for many years.

Our principles are that our product solutions must be "generic". Static product solutions are standards and this means that process sequences standardized and all aligned in the same way. Companies focus on standard software usually pursue the goal of being able to offer their products and solutions on the market quickly and cost-effectively. Our focus, on the other hand, is to clearly differentiate ourselves from the standard and standardization. Our Proway Business World warehouse management system was developed so that customers can adapt their processes to market conditions themselves at any time and very easily.

OUR SENSOR TECHNOLOGY



PROWAY FUTURE FOREST FOR SUSTAINABILITY

With our Gamma middleware as a "universal connector", the customer has the option of connecting all applications, machines and sensors. The Gamma magic cube makes it possible to manage, control and experience smart factory or smart city in real time. Our CS/6 product solution enables the dynamic management of your company. One of a company's greatest fears is that its business model will be copied overnight. For example, if Google copies the insurance standard and can offer you cheaper car insurance. If Amazon can suddenly advise you on your shopping behavior and your finances. When Apple suddenly you easier and cheaper leasing contracts because Apple has been supporting you electronically for many years. Behind these examples is an electronic standard that be used to offer many people low-cost offers. But to come back to our sustainability: Proway's aim is to offer its current and future customers solutions today, but also tomorrow, with which they can grow and develop further. Beyond the standard.

The only way out of the "standard and standardization trap" is to create added value. This path is usually uncomfortable and costs time, energy and money. The reward, however, is a secure and better future.

It is not only beneficial for the customer, but also for our employees. Projects and products that are constantly evolving help individual employees to advance in what they do and think through their daily work. We laid the foundation for this over 25 years ago with the founding of Proway. Our references and certificates on our website prove that our innovations and products already sustainably geared towards the future. That's why we are expanding the slogan "Stay healthy" to "Stay healthy and dynamic" - for a safer and better future.

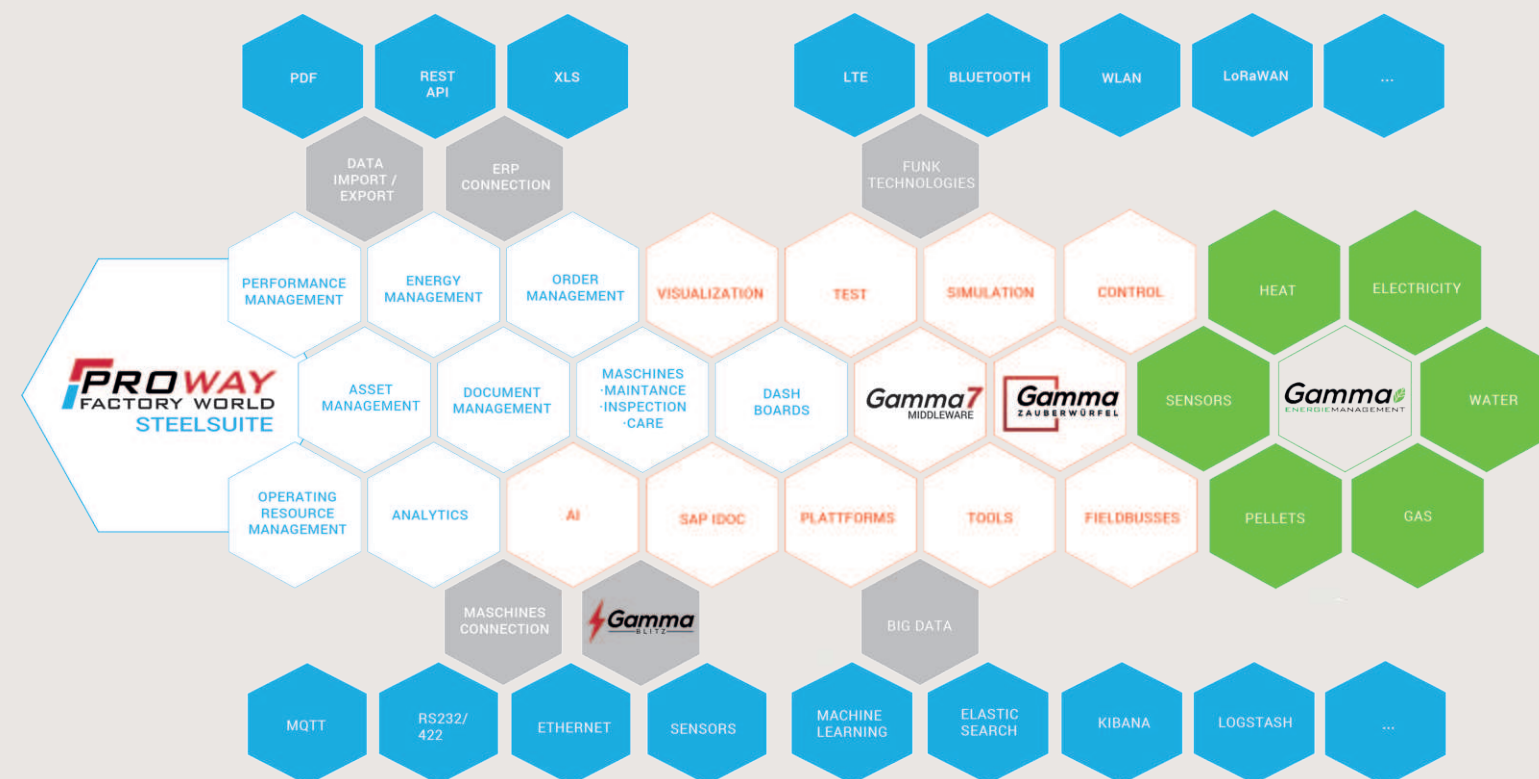
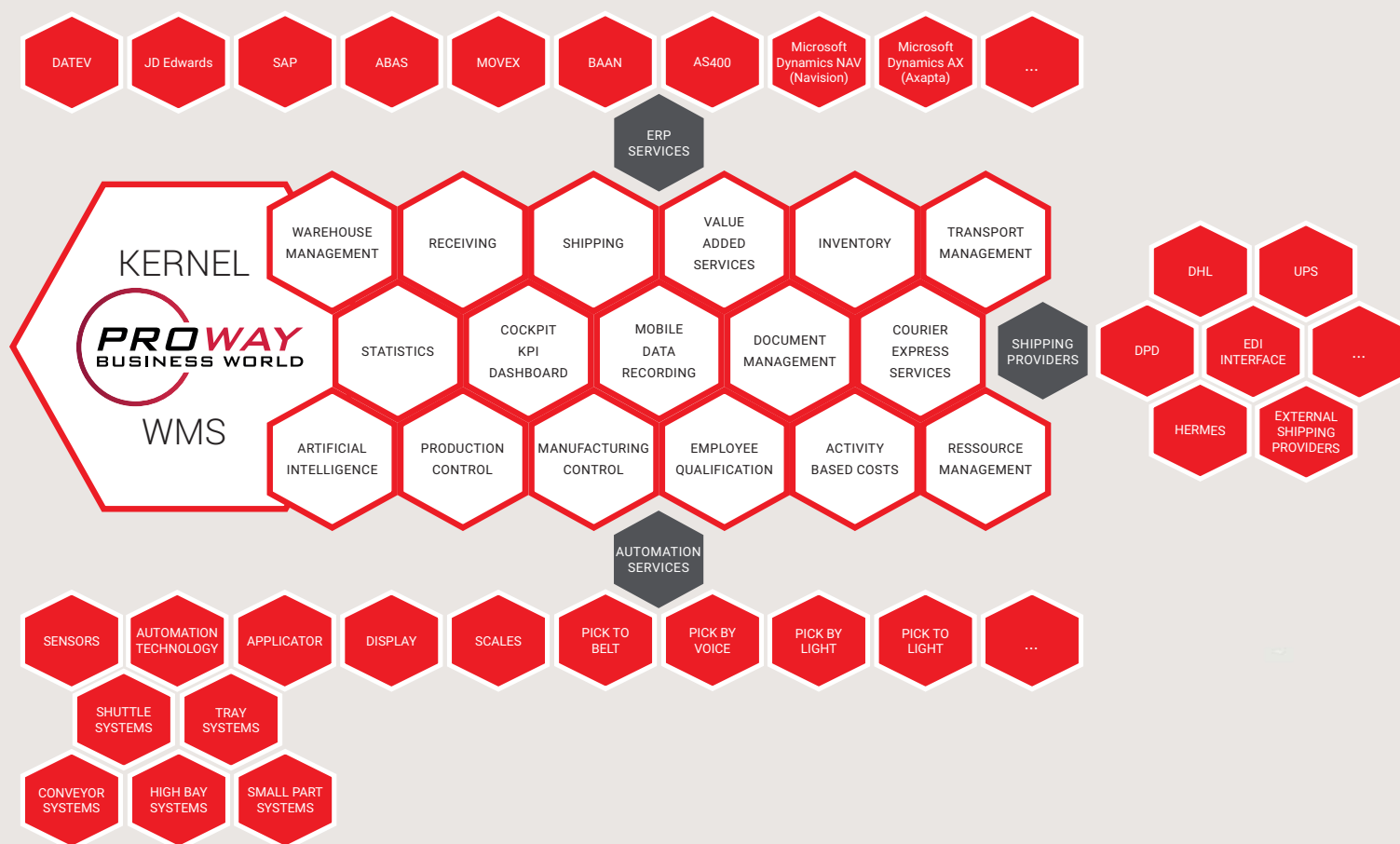


FOR A SECURE AND BETTER FUTURE



THE STANDARD
FLEXIBLE. CUSTOMIZABLE.
FUTURE PROOF.

WMS WAREHOUSE
MANAGEMENT
SYSTEM



OUR PRODUCTS FOR YOUR FUTURE

INDUSTRIES

DEVELOPMENT

MADE IN GERMANY



Aerospace



Public sector



Mechanical engineering



Industry



Chemicals



Food



Aerospace & Defence



Energy management



Telecommunications



Electrical engineering



Textiles



Pharmaceuticals



Banking



Automotive



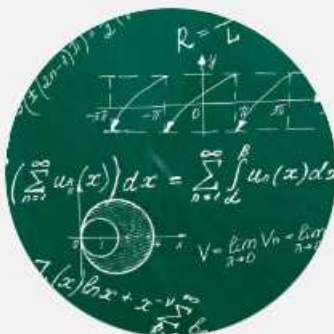
Logistics



Agriculture & farming



Steel industry



Universities and colleges



Rail transport



Research & development



Technology development



Public area



Energy, water & environment



Paper & printing industry

OUR AREAS OF EXPERTISE



EXCERPT FROM OUR CUSTOMERS & PROJECTS



Get in touch with us

We would be happy to advise you in a personal appointment and work with you to develop solutions for your specific requirements. You provide the challenge—we provide the solution!

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